Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-6. (Canceled)

7. (Currently amended) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding a chimeric retrovirus envelope protein comprising a Murine Leukemia Virus (MLV) ecotropic envelope protein and a heterologous short peptide ligand inserted at amino acid position 38 ~~within the N-terminal region or the variable region VRA~~ of the extracellular domain (SU) of the MLV ecotropic envelope protein, wherein the heterologous short peptide ligand is an RGD ligand or a gastrin releasing protein (GRP) ligand, flanked by at least one cysteine on each side, optionally with one or more intervening amino acids between an end of the heterologous short peptide ligand and the cysteine, and wherein a retroviral particle comprising the chimeric retrovirus envelope protein is capable of infecting a human cell, but not a mouse cell.

8. (Currently amended) A vector comprising a nucleic acid sequence encoding a chimeric envelope protein comprising a Murine Leukemia Virus (MLV) ecotropic envelope protein and a heterologous short peptide ligand inserted at amino acid position 38 ~~within the N-terminal region or the variable region VRA~~ of the extracellular domain of the MLV ecotropic envelope protein, wherein the heterologous short peptide ligand is an RGD ligand or a gastrin releasing protein (GRP) ligand, flanked by at least one cysteine on each side, optionally with one or more intervening amino acids between an end of the heterologous short peptide ligand and the cysteine, and wherein a retroviral particle comprising the chimeric envelope protein is capable of infecting a human cell, but not a mouse cell.

9. (Original) The vector of claim 8, wherein the vector further comprises a nucleic acid sequence that encodes a therapeutically useful polypeptide.

10. (Previously presented) A recombinant retroviral particle comprising the nucleic acid of claim 7.

11-12. (Canceled)

13. (Previously presented) A method of altering retroviral tropism of a retrovirus, the method comprising

obtaining a packaging cell;

introducing the nucleic acid molecule of claim 7 into the packaging cell;

maintaining the packaging cell under conditions such that a retrovirus is produced; and

harvesting the retrovirus from the packaging cell; thereby producing a retrovirus having an altered retroviral tropism.

14. (Previously presented) The method of claim 13, wherein the retrovirus comprises a murine leukemia virus (MLV).

15. (Previously presented) The method of claim 13, wherein the pseudotyped retrovirus does not express wild-type envelope protein.

16-35. (Canceled)

36. (Previously presented) The nucleic acid of claim 7, wherein the MLV ecotropic envelope protein is a wild type envelope protein.

37-38. (Canceled)

39. (Previously presented) The vector of claim 8, wherein the vector is a retrovirus.

40. (Previously presented) The isolated nucleic acid molecule of claim 7, wherein the human cell is a human melanoma cell or a human breast cancer cell.

41-43. (Canceled)

44. (Previously presented) The vector of claim 8, wherein the human cell is a human melanoma cell or a human breast cancer cell.

45. (Withdrawn) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding a chimeric retrovirus envelope protein comprising a Murine Leukemia Virus (MLV) ecotropic envelope protein and a human epidermal growth factor receptor (HRG) ligand inserted within the extracellular domain (SU) of the MLV ecotropic envelope protein, wherein the heterologous short peptide ligand is flanked by at least one cysteine on each side, optionally with one or more intervening amino acids between an end of the heterologous short peptide ligand and the cysteine, and wherein a retroviral particle comprising the chimeric retrovirus envelope protein is capable of infecting a human cell.

46. (Withdrawn) The isolated nucleic acid molecule of claim 45, wherein the HRG ligand is inserted at amino acid position 1 or 230 of the SU of the MLV ecotropic envelope protein.

47. (Withdrawn) A recombinant retroviral particle comprising the nucleic acid of claim 45.

48. (Withdrawn) A vector comprising a nucleic acid sequence encoding a chimeric retrovirus envelope protein comprising a Murine Leukemia Virus (MLV) ecotropic envelope protein and a human epidermal growth factor receptor (HRG) ligand inserted within the extracellular domain (SU) of the MLV ecotropic envelope protein, wherein the heterologous short peptide ligand is flanked by at least one cysteine on each side, optionally with one or more intervening amino acids between an end of the heterologous short peptide ligand and the

cysteine, and wherein a retroviral particle comprising the chimeric retrovirus envelope protein is capable of infecting a human cell.

49. (Withdrawn) The vector of claim 48, wherein the HRG ligand is inserted at amino acid position 1 or 230 of the SU of the MLV ecotropic envelope protein.

50. (Withdrawn) A method of altering retroviral tropism of a retrovirus, the method comprising

obtaining a packaging cell;

introducing the nucleic acid molecule of claim 45 into the packaging cell;

maintaining the packaging cell under conditions such that a retrovirus is produced; and

harvesting the retrovirus from the packaging cell; thereby producing a retrovirus having an altered retroviral tropism.

51. (New) The nucleic acid of claim 7, wherein the heterologous short peptide ligand is inserted at amino acid position 38 of the SU.

52. (New) The vector of claim 8, wherein the heterologous short peptide ligand is inserted at amino acid position 38 of the SU.